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ASSESSING THE ECONOMIC EFFECTS OF LATIN AMERICAN INDEPENDENCE^{*}

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Abstract

This paper discusses the economic consequences of independence in Latin America. Grand interpretations that assess Nineteenth Century Latin America by comparison to the U.S. performance are examined and the alternative approach of using African and Asian post-colonial experiences as the yardstick is explored. Empirical evidence on the consequences of removing the colonial burden and opening up to the international economy is, then, examined. The paper concludes with discussion of when Latin America fell behind.

Key words: Colonial Burden, Independence, International Integration, Retardation.

JEL Classification: N16, N46, N76

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In his classical work on Latin America, Victor Bulmer-Thomas concludes:

“The economic development of Latin America since independence is a story of unfulfilled promise”, and stresses, “the gap between living standards in Latin America and those in the developed countries has steadily widened since the early nineteenth century”¹.

This view has been qualified by Stephen Haber, who pointed out that the income gap between Latin America and Anglo-Saxon America “is not a product of the twentieth century”². John Coatsworth, in turn, added that today’s Latin American underdevelopment arose in the colonial era and *after independence*³. Evidence on levels of *per capita* income supports the view that Latin America as a whole did not worsen her position relative to the U.S.A. over the twentieth century.

INSERT TABLE 1 HERE

Independence, achieved during the years 1808-1825, and the resulting insertion in the international economy, a long process that gathered momentum between 1850 and 1873, appear as the two most important events in assessments of economic performance in nineteenth-century Latin America⁴.

However, no consensus seems to exist on how independence came about. Was it the result of an external shock such as the Napoleonic Wars and the French invasion of the Iberian Peninsula? Was it a consequence of institutional inefficiency or, conversely, a reaction against reforms and

¹ Victor Bulmer-Thomas (1994), *The Economic History of Latin America since Independence*, (Cambridge, 1994), 410.

² Stephen Haber, ed., *How Latin America Fell Behind. Essays on the Economic Histories of Brazil and Mexico, 1800-1914*, (Stanford, 1997), 1.

³ My italics. John H. Coatsworth, “Notes on the Comparative Economic History of Latin America and the United States”, in, *Development and Underdevelopment in America: Contrasts in Economic Growth in North America and Latin America in Historical Perspective*, Walther L. Bernecker and Hans Werner Tobler, eds. (New York, 1993).

⁴ See, for example, Bulmer-Thomas, *Economic History of Latin America* and Haber, *How Latin America Fell Behind*.

modernization associated to the introduction of new liberal ideas and institutions in the metropolis and, hence, an endogenous phenomenon?. Was it, perhaps, the outcome of the struggle against liberal reform and modernization in central colonies (Mexico and Peru), while in peripheral colonies (New Granada and the River Plate) resulted from militaristic opportunism (stimulated by smuggling interests) at the time of the Napoleonic invasion of the Iberian peninsula?

In David Landes's view, it was not the outcome of colonial initiative "but of the weaknesses and misfortunes of Spain and Portugal at home, in the context of European rivalries and wars"⁵.

Samuel Amaral, writing on the case of Argentina, stated, in turn, that independence was a consequence of local pressure on institutions that could not provide the needs of trade and production⁶. A different insight was provided by Stanley and Barbara Stein, who, rather than emphasizing the struggle for economic freedom, asserted, "perhaps it would be more accurate to argue that many of the colonial elite hoped to maintain allegiance to embattled Spain while enjoying the right to trade directly with Europe and the United States"⁷.

Fewer research monographs than grand interpretations make assessments of independence unpersuasive, but, in a nutshell, it can be stated that wars of independence led to fragmentation of

⁵ David S. Landes, *The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor?*, (New York, 1998), 313.

⁶ Samuel Amaral, "Del mercantilismo a la libertad: las consecuencias económicas de la independencia argentina", in *La independencia americana: consecuencias económicas*, Leandro Prados de la Escosura and Samuel Amaral, eds. (Madrid, 1993), 202-3.

⁷ Stanley J. Stein and Barbara H. Stein, *The Colonial Heritage of Latin America. Essays on Economic Dependence in Perspective*, (New York, 1970), 131.

political power, militarization of society, and mobilization for war of resources and men⁸. Political turmoil did not end with independence. Dispute over national borders and civil wars continued for decades. As Landes exuberantly put it, “New World strongmen exploited the vacuum and seize the power . . . anarchic negativism invited macho warlordism”⁹.

A widely held view among historians is that independence was followed by a marked decline in economic activity: *per capita* income did not return to colonial levels until mid-nineteenth century¹⁰. Moreover, the break with Spain and Portugal did not bring with it any immediate changes in the existing social and economic structures¹¹. The land tenure system and factor markets, has been argued, did not suffer drastic changes after independence. For example, slavery lasted until mid-nineteenth century except in the cases of Brazil and Cuba where there were still slaves in the 1880s. The fiscal system remained in part: *mita* ended but *tributo* often returned. Debt peonage and forms of *repartimiento* persisted in some regions until the late nineteenth century. Finally, openness to trade and factor inflows was still reduced. Change, nevertheless, was brought by independence. Among its positive

⁸ Tulio Halperín Donghi, “Economy and Society”, in *The Cambridge History of Latin America*, Leslie Bethell, ed., Vol. III, (Cambridge, 1985).

⁹ Landes, *Wealth and Poverty of Nations*, 313

¹⁰ Coatsworth, “Notes on the Comparative Economic History”. In the case of the U.S., conjectural estimates show that *per capita* income stagnated in the quarter of century after independence while it grew below 0.3% yearly in the opening decades of the nineteenth century. Cf. Peter C. Mancall and Thomas Weiss, “Was Economic Growth Likely in Colonial British North America?”, *Journal of Economic History*, 59, 1, pp. 17-40.

¹¹ Bill Albert, *South America and the World Economy from Independence to 1930*, (London, 1983), 25. Neither they took place in the former metropolis. It can be conjectured that GDP per head in the 1790s was not overcome in Spain until the 1840s Cf. Leandro Prados de la Escosura, *De imperio a nación. Crecimiento y atraso económico en España, 1780-1930* (Madrid, 1988), chap. 1.

effects on growth, historians highlight the end of external trade monopoly and the possibility of raising capital in international markets, while the end of the *de facto* customs union, the capital flight and the collapse of the colonial fiscal system are stressed among its negative effects¹².

The costs and benefits of independence have been assessed by Coatsworth who concluded, that, in the short-run, the measurable direct and indirect economic benefits of independence were small, so were the costs of colonialism: benefits were overcome by costs (prolonged wars, civil strife, economic instability); while, in the long-run, there were economic benefits from the destruction of the colonial institutional order freeing the colonies from Spanish taxation and trade monopoly.

Independence led to institutional modernization¹³.

Should the costs of colonialism include not only what was extracted but what was not produced due to wrong incentives created by colonial institutions and path dependency? Why the elimination of tax and tariff restrictions did not suffice to promote self-sustained growth?, are recurrent, yet unanswered, questions among historians of Latin America.

To provide an answer to all these crucial questions is well beyond the scope of this paper and its author's ability. Thus, in the rest of the paper, grand interpretations or meta-narratives, centered on the theme Latin America in the U.S. mirror will be assessed and, as an alternative approach, evaluating post-independence Latin American performance in the African and Asian mirrors will be proposed. In the third part of the paper, the empirical evidence on the main consequences of independence,

¹² Bulmer-Thomas, *Economic History of Latin America*, 28-31.

¹³ John H. Coatsworth, "La independencia latinoamericana: hipótesis sobre los costes y beneficios", in *La independencia americana: consecuencias económicas*, Leandro Prados de la Escosura and Samuel Amaral, eds., (Madrid, 1993), 19.

resulting from removing the colonial burden and opening up to the international economy, will be examined. Some concluding reflections complete the paper¹⁴.

Grand interpretations: Latin America in the U.S. mirror

After World War II and over three decades, the *Dependentist* School provided the dominant grand theory about Latin America's underdevelopment. Stanley and Barbara Stein in their widely read book *The Colonial Heritage of Latin America. Essays on Economic Dependence in Perspective* set the interpretation of Latin American independence in the light of *Dependencia*.

Why did British America and Latin America develop so differently after independence?, Why did Latin America remain a primary producer while the United States became industrialized?. In the Steins' view, the core of Iberian colonialism in Latin America was "the organization and maintenance of economies profitable to overseas metropolises and .. through them to the key economies of western Europe: Holland, England, and France"¹⁵. The colonial economic background (with the large estate as its key element) was reinforced by local conditions (lack of political unity, conflict of economic interests, highly concentrated income and poverty) and, in particular, by the economic pressure of Great Britain. "The English", they conclude, "had been the major factor in the destruction

¹⁴ This essay focuses exclusively on the effects of independence on economic performance and does not address the background to struggles for independence. A comprehensive coverage of the process of independence and its first half century can be found in Leslie Bethell, ed., *The Cambridge History of Latin America*, (Cambridge, 1985), vol. III. I have received useful advice from the editors. I would like to acknowledge Jeremy Adelman, Bob Allen, Stan Engerman, Alejandra Irigoin, Héctor Lindo-Fuentes, Carlos Marichal, Alfonso Quiroz, Joan Rosés, and especially Patrick O'Brien for their comments. I am solely responsible for any remaining errors.

¹⁵ Stanley J. Stein and Barbara H. Stein, "D.C.M. Platt: The Anatomy of 'Autonomy'", *Latin American Research Review*, 15 (1980), 134.

of Iberian imperialism; on its ruins they erected the informal imperialism of free trade and investment”¹⁶. The Steins’ main contention is that the failure to achieve sustained and balanced growth over the nineteenth-century was a result of the persistence of colonial heritage in the new republics.

Perhaps it was Christopher Platt who most firmly opposed the Steins’ views. In Platt’s assessment of post-colonial Latin America changes had very limited impact, and only after 1860 a lagged effect of independence took place. Independence brought a redirection of trade from Iberia to Northern Europe and the United States but the volume of Latin American trade did not alter significantly. Independence did not make Latin America into a major primary produce exporter nor into a large market for foreign industrial goods. In addition, modern economic growth was constrained by lack of human and physical capital, shortage of industrial fuels, poor infrastructure and small markets. The break with Spain, Platt argues, “far from confirming the integration of Latin America as a dependent partner in the world economy, reintroduced an unwelcome half century of ‘independence’ from foreign trade and finance”, leading to the conclusion that nineteenth-century Latin America was “shaped by domestic circumstances rather than by the planned requirements of distant metropolis”¹⁷. Platt’s views could be perhaps re-phrased by saying that Latin America became prematurely independent before the first wave of globalization, with its powerful stimulus for growth, arrived.

The halcyon days of *Dependentism* are long passed and empirical research within national boundaries is the way economic historians deal nowadays with the question of what independence did mean to Latin American countries.

¹⁶ Stanley and Barbara Stein, *Colonial Heritage*, 155.

¹⁷ D.C.M. Platt, “Dependency in Nineteenth-Century Latin America: An Historian Objects”, *Latin American Research Review*, 15 (1980), 130.

The irruption of new institutional economic history in Latin America has renewed the grand interpretations' tradition and led to an explicit comparison with the US historical experience, stressing the striking differences between British North American and Iberian American colonies and its long-run effects on growth. They provide, according to Douglass North, "the best comparative case . . . of the consequences of divergent institutional paths for political and economic performance"¹⁸. Their radically different evolution reflected the imposition of distinct metropolitan institutions on each colony¹⁹. North's main proposition is that different initial conditions, in particular, the religious and political diversity in the English colonies as opposed to uniform religion and bureaucratic administration of the existing agricultural society in the Spanish colonies (Mexico and Alto Peru, in particular) are behind differences in performance over time.

Are institutions really exogenous?. This is the claim of those reacting to the new institutional economic history approach²⁰. In Spanish America, Engerman and Sokoloff posit, initial inequality of wealth, human capital and political power conditioned institutional design and, thus, performance. Large scale estates, built on pre-conquest social organization and extensive supply of native labor, established the initial levels of inequality. Elites (by 1800, less than 20 per cent of the population was white) managed to design institutions protecting their privileges. Government policies and institutions reproduced initial conditions leading to the restriction of competition and selective policies in offering

¹⁸ Douglass C. North, "Institutions and Economic Growth: An Historical Introduction", *World Development*, 17, 9 (1989), 1330.

¹⁹ Douglass C. North, *Institutions, Institutional Change and Economic Performance*, (Cambridge, 1990), 102.

²⁰ For a recent assessment, cf. Dani Rodrik, Arvind Subramanian and Francesco Trebbi, "Institutions Rule: The Primacy of Institutions over Integration and Geography in Economic Development", IMF Working Paper 02/189 (November 2002).

opportunities²¹. For example, in Mexico and Peru, a large native population and Spain's acceptance of pre-existing native practices of awarding claims on labor and natural resources to the elite fostered highly concentrated landholdings and, consequently, inequality²². All in sharp contrast with white populations' predominance, evenly distributed wealth and high endowment of human capital per head in British North America²³.

The response to the factor endowment and wealth distribution arguments from institutional historians has been to emphasize the relative independence of institutions, policies, and events from any given distribution of wealth and income. While acknowledging that the legal system represented an obstacle to growth as the caste system constrained factor mobility, John Coatsworth and Gabriel Tortella deny the links between Iberian institutions transferred to America and the initial unequal distribution of income and wealth, stressing that,

“the caste system of the New World deliberately weakened the grip of local conquerors and magnates on the underlying indigenous population and placed sharp limits on the growth of inequality

²¹ Kenneth Sokoloff and Stanley L. Engerman, “Institutions, Factor Endowments, and Paths of Development in the New World”, *Journal of Economic Perspectives*, 14, 3 (2000), 217-32.

²² Stanley L. Engerman, Stephen H. Haber and Kenneth L. Sokoloff, “Inequality, Institutions, and Differential Paths of Growth among New World Economies”, in *Institutions, Contracts, and Organizations*, Claude Menard, ed. (Cheltenham, 2000), 108-34.

²³ It should be noted that inequality in Latin America was probably comparable to that in the slave states of North America where per capita income was, however, surely much higher.

in the distribution of wealth by recognizing indigenous property rights and guaranteeing the majority of the indigenous population access to land independent of the colonial elite”²⁴.

North, Summerhill, and Weingast concede, in turn, that factor endowments were the driving force of European colonization, but they provide insufficient explanation of post-independence behavior as the discrepancies between the US path to the world leadership and Spanish America’s violence and retardation confirm. If factor endowment would determine political outcomes, they argue, “Argentina would be as rich as the United States”²⁵. North and his associates stress the sharp institutional contrast between independent United States (with a constitution and a stable and well specified system of economic and political rights) and Latin America (under warfare). In their view, the absence of institutional arrangements capable of establishing cooperation between rival groups led to destructive conflict that diverted capital and labor from production and consigned the new republics to poor performance relative to the U.S.A..

So far all the views surveyed take the United States as the yardstick to measure Latin American achievements over the nineteenth century. Is such an approach the adequate strategy to disentangle the causes of Latin America’s poor performance? In fact, over-emphasizing the contrast

²⁴ John H. Coatsworth and Gabriel Tortella, “Institutions and Long-Run Economic Performance in Mexico and Spain, 1800-2000”, paper presented at the conference on *Desarrollo comparado: España y México*, Mexico City, July 4-6, 2001 (mimeo)

²⁵ Douglass C. North, William R. Summerhill and Barry R. Weingast, “Order, Disorder, and Economic Change: Latin America versus North America”, in *Governing for Prosperity*, Bruce Bueno de Mesquita and Hilton L. Root, eds. (New Haven, 2000), 19. It should be beared in mind, however, that by 1913 Argentina was the sixth country of the world in terms of per capita income and only second to a European country, Britain (cf. Leandro Prados de la Escosura, “International Comparisons of Real Product, 1820-1990: An Alternative Data Set”, *Explorations in Economic History*, 37, 1 (2000), 1-40).

with North America leads to a negative assessment of Latin America's economic and political behavior both before and after independence. The income gap between colonial British and Latin Americas kept widening in the half century after independence: according to Maddison, the U.S. doubled Latin American product per head in 1820 and more than trebled it by 1870²⁶.

However, stressing once and again that a large gap existed has paralyzing effects on the research on nineteenth-century Latin American economic history. Actually, it mixes up the initial conditions in the new republics with its post-independence performance. Moreover, it diverts attention from the real issue: the extent to which Latin America under-performed in terms of its own potential. Nathaniel Leff's reflections on the case of Brazil could be extended to Latin America as a whole. The fact that the new republics fell behind the U.S. or north western European nations does not imply that development opportunities were necessarily missed. On the basis of predictable large differences in human (and physical) capital to labor ratios it could be hypothesized that different steady states probably prevailed in British and Latin Americas.

The relevant question would be, then, What are the feasible counterfactual scenarios that might have led to higher paths of growth?²⁷ These hypothetical alternatives should be clearly specified before jumping to the conclusion that Latin America failed because she followed a different and less successful way to the twentieth century than the United States or Germany. In fact, *per capita* income divergence between rich (Core) and poor (Periphery) countries is the dominant feature of the

²⁶ Maddison, Angus, *The World Economy. A Millennial Perspective* (Paris, 2001), 264.

²⁷ Nathaniel H. Leff, "Economic Development in Brazil, 1822-1913", in *How Latin America Fell Behind. Essays on the Economic Histories of Brazil and Mexico, 1800-1914*, Stephen Haber, ed. (Stanford, 1997), 58-9, explores alternative scenarios of rising productivity in the domestic sector relative to the external sector, of higher investment on social overhead capital and of immigration restrictions, to reject all of them as unrealistic.

nineteenth century²⁸. Historical research can only elucidate within the limits of feasibility, that is, the extent to which events followed the course they did as determined by its initial conditions and its internal over-time logic. As Leff put it, “the study of history can spare later observers depressing reflections that have no basis in the realm of the possible”²⁹.

Moreover, the current historical approach to Latin American retardation resembles historical assessments of continental European retardation a quarter of century ago when countries’ success or failure depended on the extent to which they were able to replicate British industrialization’s experience. As a result, a common claim was to depict France as a retarded country. Gerschenkron’s analysis of late comers’ substitution for missing pre-requisites and, especially, O’Brien and Keyder’s path-breaking study of growth in France and Britain showed that differences in endowments and, hence, relative factor prices, past economic policies and institutions led to different paths to economic development and, therefore, only achieving its own growth potential would establish a country’s success or failure³⁰. Geography, public policies and political institutions all of them mattered in shaping Latin American countries’ long-run economic performance.

Latin America in the African and Asian mirrors

²⁸ This way of reasoning has recently been applied to the study of the USSR development by Robert Allen, *Farm to Factory: A Reinterpretation of the Soviet Industrial Revolution*, (Oxford, 2002) (mimeo). As Allen writes, this is so because “convergence represents the diffusion of the industrial revolution” (1-8).

²⁹ Leff, “Economic Development of Brazil”, p. 59. A more complete discussion of counterfactual propositions and its potential effects on Brazilian long-run growth is exposed in Nataniel H. Leff, *Underdevelopment and Development in Brazil*, (London, 1982), 2 vols.

³⁰ Alexander Gerschenkron, *Economic Backwardness into Historical Perspective. A Book of Essays*, (Cambridge, 1962); Patrick O’Brien and Çaglar Keyder, *Economic Growth in Britain and France, 1780-1914. Two Paths to the Twentieth Century*, (London, 1978).

Since difficulties in modeling growth potential might render the proposal impractical, a promising line of research would be to compare Latin America with other former European colonies. It is worth noticing that a non negligible number of Asia, African and Eastern European countries shared, at the time of their independence, some of the initial conditions of the new Latin American republics: demographic patterns (a delayed demographic transition and persistent high fertility until late in the twentieth-century, low population density as in Africa and the Russian Empire but not in Asia), a high share of adult population employed in agriculture, low social and human capital, poor contract enforcement, and a weak government yielding to interest groups. On top of that, a glance at levels of GDP *per capita* at the time of independence for the main African and Asian countries points to a stark parallelism with Mexico or Brazil by 1820 while all of them remain way below the US level at the time of its independence (1776).

INSERT TABLE 2

Does all this mean that the current approach that depicts the independence of Latin America as part of the wave of liberal revolutions that swept throughout Europe in the post-Napoleonic era is an inadequate piece of *eurocentrism* and that, instead, a more appropriate approach would be assimilating the post-colonial experience in Latin America to those that took place, later in time, in other parts of the Periphery (Asia and Africa)?³¹.

Models linking economic geography and institutions that allow for diverse colonial patterns seem useful for the purpose of placing the experience of post-independence Latin America into a more realistic context. Differences in economic prosperity across countries are linked to geographic,

³¹ This alternative approach has also been suggested recently by Jonathan C. Brown in his review of “Jeremy Adelman, *Republic of Capital. Buenos Aires and the Legal Transformation of the Atlantic World* (Stanford, 1999)”, *Hispanic American Historical Review* 81, 3-4 (2001), 765-71.

climatic or ecological factors³². Jeffrey Sachs, for example, concludes that technology, disease environment and transport costs are determined by physical geography and climate³³. Acemoglu, Johnson and Robinson, in turn, point to the disease environment at the time of Europeans arrival as a determinant of the patterns of European settlement and the subsequent institutional development of the former colonies. In densely populated areas there were diseases (malaria and yellow fever) to which Europeans were vulnerable and that prevented them from settle in large numbers³⁴.

In another recent contribution, Acemoglu, Johnson and Robinson stress the differential impact of colonialism: societies where colonialism led to the establishment of good institutions (“institutions of private property” that allow a broad sector of the society to receive the returns of their investments) prospered relative to those where colonialism imposed “extractive institutions”, under which most of the population risks expropriation at the hands of the ruling elite or the government³⁵. European colonialism led paradoxically to the development of relative better institutions in previously poor areas, while introduced extractive institutions or reinforced bad

³² Jared Diamond, *Guns, Germs and Steel. The Fate of Human Societies*, (New York, 1997).

³³ Jeffrey D. Sachs, “Tropical Underdevelopment”, NBER Working Paper Series no. 8119 (2001). Also, cf. McArthur, John W. and Jeffrey D. Sachs, “Institutions and Geography: Comment on Acemoglu, Johnson and Robinson (2000)”, NBER Working Paper Series 8114 (2001) for a typology of the approaches.

³⁴ Daron Acemoglu, Simon Johnson and James A. Robinson, “The Colonial Origins of Comparative Development: An Empirical Investigation”, *American Economic Review*, 91, 5 (2001), 1369-1401. Note however that a disease environment not always coincided with high population density. The historical consensus on Sub-Saharan Africa would be a case in point.

³⁵ Daron Acemoglu, Simon Johnson and James A. Robinson, “Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution”, *Quarterly Journal of Economics*, 117, 4 (2002), 1231-1294.

institutions in previously prosperous places. The reason is that poor areas were less densely populated enabling Europeans to settle in large numbers and to develop their own institutions hence encouraging investment and growth. Conversely, where abundant population showed relative affluence, establishing “extractive institutions” (forced labor and tributes, often existing already in the pre-colonial era, over the locals) with political power concentrated in the hands of an elite, represented the most efficient choice for European colonizers, despite its negative effects on long-term growth³⁶.

Spanish colonization of Meso-America and the Andes, French dominated South-East Asia, British India, and regions of Africa under French or British dominance would be examples of colonial “extractive institutions”. In the cases of Mexico and Peru viceroyalties, the exploitation of silver deposits determined that economic activity would center on those locations where the deposits were found and conditioned population settlement, the location of urban centers, and fiscal policies³⁷.

There are interesting connections between Acemoglu, Johnson and Robinson’s interpretation of different colonial patterns and Stanley and Barbara Stein’s conjecture thirty years ago,

“had the Englishmen found a dense and highly organized Amerindian population, the history of what is called the United States would record the development of a stratified, bi-racial, very different society. In a larger context, the existence of a huge, under-populated virgin land of extraordinary resource endowment directly facing Europe and enjoying a climate comparable to that

³⁶ An exception seems to have been the American Ante-bellum South.

³⁷ Cf. Roberto Cortés Conde and George T. McCandless, “Argentina: From Colony to Nation. Fiscal and Monetary Experiences from the Eighteenth and Nineteenth Centuries”, in *Transferring Wealth and Power from the Old to the New World. Monetary and Fiscal Institutions in the 17th through the 19th Centuries*, Michael D. Bordo and Roberto Cortés-Conde, eds. (Cambridge, 2001), 379.

of Europe represented a potentiality for development which existed nowhere else in the New World”³⁸.

It can be concluded, then, that both institutional and geographical approaches predict significantly different outcomes for colonial and post-independence British North America and Latin America and it could be added that in empty lands more efficient institutional settings went hand in hand with better factor endowment (higher human capital/labor and physical capital/labor ratios).

Evidence on exogenous geographic factors such as climate, latitude, and distance to the sea coast, together with levels of mortality, population density, and urbanization at the time of European colonization gathered in Table 3 tend to support the view that a wider range of similarities existed between most Latin American countries and the European colonies in Asia and Africa than with British North America.

INSERT TABLE 3

Another way of stressing the similarities between Latin America and other colonial experiences is provided by comparing assessments of post-independence performance in Sub-Saharan African and Latin American countries. The striking degree of coincidence of rather different assessments: those by present-time development economists, in the case of Sub-Saharan Africa, and those by economic historians, in that of Latin America, suggest that post-independence Africa (and, presumably, Asia) is a more appropriate benchmark of comparison for Latin America than the U.S. exception. Nonetheless, the different timing of independence in Latin America (prior to the first wave of globalization) and in Africa and Asia (during the first stages of the second globalization) surely had a distinctive impact on economic growth.

Let’s start with an overall assessment of Sub-Saharan Africa’s independence that would be accepted by most scholars as a good depiction of Latin American post-colonial experience,

³⁸ Stanley and Barbara Stein, *Colonial Heritage of Latin America*, 128.

“..in the move to independence . . . optimism was widespread. National development plans envisioned rapid growth, fuelled by industrial expansion, diversification of exports, modernization of agriculture, and public investment in health and education. Looking back, the legacy [was] mainly one of disappointment”³⁹.

Assessments of different aspects of post-independence Africa and Latin America are illuminating:

The shock of political independence.

[In Latin America, there was a] “complete lack of experience in autonomous decision making and government: state-building required creating institutions from scratch in an environment of change and uncertainty. In its absence, warfare was the norm”⁴⁰.

“In most [African] countries, neither the state, operating at national scale, nor private domestic capital .. existed in a meaningful sense at the time of independence”⁴¹.

The number and size of countries after independence

[The new Latin American republics did] lack self-enforcing institutions that constrained predatory action. In the face of widespread violence, political organization disintegrated into smaller units (around a caudillo for protection)⁴²

Because of colonial heritage, Africa has smaller countries in terms of population than other regions. Many states combined it with low levels of income⁴³.

³⁹ Benno N. Ndulu and Stephen A. O’Connell, “Governance and Growth in Sub-Saharan Africa”, *Journal of Economic Perspectives*, 13, 3 (1999), 42.

⁴⁰ North, Summerhill and Weingast, “Order, Disorder”, 45.

⁴¹ Ndulu and O’Connell, “Governance and Growth”, 63.

⁴² North, Summerhill and Weingast, “Order, Disorder”, 44-5.

Indirect Governance

[In Latin America,] “the caste system of the New World deliberately weakened the grip of local conquerors and magnates on the underlying indigenous population and .. recognized indigenous property rights .. guaranteeing the majority of the indigenous population access to land independent of the colonial elite”⁴⁴.

[The] French administrated their [African] territories federally while the British tradition of indirect colonial governance was less centralizing. They acted to reinforce ethnic identities. It was the existence of national borders that gave rise to a political management problem (local scale of economic and political activity)⁴⁵.

Inherited Institutions of the Metropolis

“[T]he struggle was imbued with ideological overtones that stemmed from the American and French revolutions. Independence [in Latin America] brought United States inspired constitutions, but with radically different consequences”⁴⁶.

The inability to limit political power [in Latin America] led to the development of an authoritarian system and rent-seeking⁴⁷.

Political constitutions at the time of [African] independence were modeled on their European counterparts: British colonies, parliamentary systems; French colonies, republican ones with strong executive positions. On paper, these institutions built in substantial pluralism and political liberties.

⁴³ Paul Collier and Jan Willem Gunning, “Why Has Africa Grown Slowly?”, *Journal of Economic Perspectives*, 13, 3 (1999), 9.

⁴⁴ Coatsworth and Tortella, “Institutions”.

⁴⁵ Ndulu and O’Connell, “Governance and Growth”, 46-9.

⁴⁶ North, “Institutions and Economic Growth”, 1329.

⁴⁷ North, Summerhill and Weingast, “Order, Disorder”, 48.

But they were not to last. By 1975, .. nearly all African political regimes had cast off the trappings of pluralism and replace it with authoritarian structures⁴⁸.

Institutions, infrastructure, underdevelopment

Latin America stagnated because economic institutions distorted incentives and constrained development (political risk associated with unpredictable policies and inefficient property rights and tax and regulatory systems) and high transport costs prevented exploitation of natural resources⁴⁹.

Lack of social capital and subsequent high incidence of corruption, heavily regulated financial markets with bank lending directly to the government, poor infrastructure and poor contract enforcement (with high marginal return for capital and low rate of investment as its consequences) are obstacles to development in post-colonial Africa⁵⁰.

Some topics for comparative research on post-colonial experiences in Africa, Asia and Latin America emerge from the discussion. Firstly, The consensus is that the contemporary African political map was largely determined by the nineteenth century “scramble for Africa”. However, it is noteworthy that the same fragmentation occurred in Latin America after independence suggesting that an endogenous explanation would be more appropriate.

Secondly, Why the British and Spanish often used indirect governance in their African and Asian and Latin American colonies, respectively? High indigenous population density, as suggested by Acemoglu, Johnson and Robinson, does not seem to fit the case of Sub-Saharan Africa.

⁴⁸ Ndulu and O’Connell, “Governance and Growth”, 47.

⁴⁹ Coatsworth, “Economic and Institutional Trajectories”, 23-4.

⁵⁰ Paul Collier and Jan Willem Gunning, “Explaining African Economic Performance”, *Journal of Economic Literature*, 37, 1 (1999), 65-75.

Thirdly, a move towards authoritarian regimes took place in Latin America and African and Asian ex-colonies after a democratic start immediately after independence. Was it because of the necessity for strong leadership when institutions are initially weak and latent conflicts strong?

Assessing the consequences of independence: removing the colonial burden and opening up to the international economy

Most of the grand views exposed treat either institutions or factor endowments as exogenous. Moreover, they lack a time dimension and implicitly present a closed economic model. So, if the static comparison between Latin America and the USA is discarded, in order to assess the consequences of independence for Latin America a dynamic framework is needed that captures the impact of the break of the colonial regime and the new republics' gradual incorporation to an increasingly integrated international economy. Moreover, the path to independence was quite different between regions: the way it was won and the previous degree of commitment to the colonial mercantilism conditioned the new republics' performance. Independence did not level off regional disparities.

In the historical literature the fiscal and trade burden of the empire has been emphasized, in particular, for the case of New Spain (Mexico). The fiscal burden consists of the taxes levied on the indigenous population to maintain the colonial system and it included the so called in the metropolis *Indies' remittances*, or surpluses of the colonial administration that were sent to Spain. John Coatsworth estimated in 4.2 percent of Mexican GDP the fiscal burden by 1800 and, to my knowledge, no estimate is available for other parts of Spanish empire⁵¹. In the 1790's, 5 million pesos were, on

⁵¹ John H. Coatsworth, "Obstacles to Economic Growth in Nineteenth-Century Mexico", *American Historical Review*, 83, 1 (1978), 84-5. A figure significantly higher than that for the Thirteen North American Colonies in the eve of independence.

average, sent annually to the metropolis⁵². It represented, perhaps, more than half of all the sums sent to Spain from Latin American colonies⁵³. Herbert Klein claimed that by 1800 residents in Bourbon Mexico paid 70 percent more taxes than Spaniards in the metropolis while Carlos Marichal reduced the difference to 40 percent⁵⁴. In any case, “the colonists were making a striking contribution to the imperial administration”⁵⁵.

Removing the colonial rule represented getting rid of the fiscal burden and *ceteris paribus* it would add to Latin American GDP. However, to get an idea of the net gain of Latin America we should put it against the expenses resulting from the increase in administration costs derived from many, not a single one political unit. Reallocating resources from a big closed economy, the colonial empire, to small open economies surely implied a non negligible cost.

A fragmentation of the initial national divisions took place soon after independence. Central America separated from Mexico by 1823, but the Central American Federation only survived until 1838 and led to the creation of five new countries in 1839 (El Salvador, Costa Rica, Honduras,

⁵² Carlos Marichal, “Beneficios y costes fiscales del colonialismo: las remesas americanas a España, 1760-1814”, *Revista de Historia Económica*, XV, 3 (1997), 483.

⁵³ If “Indies remittances are estimated, on average, in 178 million reales de vellón (8.9 million pesos), cf. Leandro Prados de la Escosura, “La pérdida del imperio y sus consecuencias económicas”, in *La independencia americana: consecuencias económicas*, Leandro Prados de la Escosura and Samuel Amaral, eds. (Madrid, 1993), 256-9, 269-70, revised upwards with Marichal, “Beneficios y costes fiscales”.

⁵⁴ Herbert Klein, “La economía de la Nueva España, 1680-1809: un análisis a partir de las cajas reales”, *Historia Mexicana*, 34, 136 (1985), 561-609; Carlos Marichal, *La bancarrota del virreinato. Nueva España y las finanzas del Imperio español, 1780-1810*. (Mexico, 1999), 92.

⁵⁵ Carlos Marichal and Marcello Carmagnani, “From Colonial Fiscal Regime to Liberal Financial Order, 1750-1912”, in *Transferring Wealth and Power from the Old to the New World. Monetary and Fiscal Institutions in the 17th through the 19th Centuries*, Michael D. Bordo and Roberto Cortés-Conde, eds. (Cambridge, 2001), 287.

Nicaragua and Guatemala). By 1830 Colombia, comprising Venezuela, Colombia, Panama and Ecuador, broke up into three countries, Venezuela, New Granada (present-day Colombia and Panama) and Ecuador. The Peru-Bolivia union (new republics in 1824 and 1825, respectively) created in 1836, collapsed in 1839. Mexico lost half its territory by 1847 (Texas (1836), Yucatan (1839-1843) and California). The Viceroyalty of the River Plate became three separate countries: Uruguay that became independent in 1828, Paraguay and Argentina, where the search for a political solution to Buenos Aires and the provinces conflicts had to wait for a (limited) solution until 1861.

If governments have some fixed costs (administrative, providing services), it is hard to provide them at minimum costs. Hence, despite its inefficiency, colonial administration would take advantage from the increasing returns and the economies of scale all large organizations enjoy. Separation brought with it clearly negative effects in terms of economic efficiency: commercial links, however weak in colonial times, among regions were no longer guaranteed, costs in defense and law enforcement duplicated, and the coordination in the provision of public goods was more difficult⁵⁶.

The independence implied the demise of the largest monetary union and *Ancien Régime* fiscal structure in existence⁵⁷. A single fiscal system within a monetary and customs union would represent significant savings compared to multiple national fiscal and monetary units. Monetary disintegration contributed to political fragmentation and reflected in weak national administrations and increasing transaction costs.

For each new republic the challenge was to create a new fiscal and monetary system and a domestic financial market. Attempts were made at superimposing the United States federalist tax model

⁵⁶ Cf. the theoretical discussion in Patrick Bolton and Gérard Roland, “The Breakup of Nations: a Political Economy Analysis”, *Quarterly Journal of Economics*, 113 (1997), 1057-90.

⁵⁷ Marichal and Carmagnani, “From Colonial Fiscal Regime to Liberal Financial Order”, 296. I am drawing on Marichal’s part of this paper over the next paragraph.

upon colonial Spanish administrations but the outcome was a rigid and inefficient system. Customs duties became the backbone of the new fiscal systems, as it had been the case in post-independent United States. The result was that most Latin American governments suffered chronic deficits over the first half of the nineteenth century as tax revenues stagnated and military expenses raised. On top of it, there was an increasing subordination of fiscal policies to military and political caudillos at the expenses of tax administration.

The fragmentation of monetary regimes and chronic public deficits constituted an obstacle to the emergence of modern financial markets throughout Latin America up to 1850. A vicious cycle emerged in which fiscal weakness led to weak government that led, in turn, to frequent challenges to the elite in power and, as a result, civil strife proliferated.

North, Summerhill and Weingast provide a highly theoretical and persuasive, though untested, explanation for the institutional background to the fiscal and administrative problems faced by the newly independent republics. In the colonial era, political order without incentives for long-term economic growth (as limits were defined for groups to expropriate or attack each other) was the pattern in Latin America. After independence, third-party enforcement of rights and exchange vanished and one group's aggression was insufficiently costly to be avoided, with widespread turmoil, violence and political instability as a result. No stabilizing institutions in place meant that it was impossible to achieving efficient economic organization. Hence, a scramble to preserve colonial protection and privileges or to secure new powers occurred⁵⁸. The break with the metropolis, North and his collaborators argue, destroyed many of the institutions that provided credible commitments to rights and property within the Spanish empire. Creoles gaining political power after independence inherited a centralized political system without inheriting critical elements of the formal and informal

⁵⁸ North, Summerhill and Weingast, "Order, Disorder", 54-55.

constraints protecting corporate groups and other elites. As a result, “state-building” failed in the new republics.

This kind of reasoning has been objected by Stephen Haber and Armando Razo who claim that in [post-1910] revolutionary Mexico there was no necessary connection between political instability and the security of property rights⁵⁹. Stable institutions can be impediments for growth when under their rule risk taking is constrained and property rights are not enforced⁶⁰.

A detailed and overall assessment for the new independent republics is missing, but available national studies provide some tentative answers. A few testimonies from the post-independence era is as much as it can be used to put this theoretical construction to the test.

In Mexico, a profound fiscal crisis took place in the 1810s under civil war. Destruction of the complex colonial treasury system occurred due to the extraordinary rise in internal military expenditures, a growing tendency to rely heavily on forced loans and the trend toward increasing fiscal autonomy of local treasuries. All it had an impact on the monetary system and led to the disintegration of local credit markets. Meanwhile, public internal debt grew by nearly 40 percent between 1823 and 1848, as a result of growing public deficits (that reach up to 40 per cent of total government expenditure). Such a situation was totally new, as there were no deficits under colonial rule. On the contrary, Marichal

⁵⁹ Stephen Haber and Armando Razo, “Industrial Prosperity under Political Instability: An Analysis of Revolutionary Mexico”, in *Governing for Prosperity*, Bruce Bueno de Mesquita and Hilton L. Root, eds. (New Haven, 2000), 106-52. Spain’s historical experience provides additional support: fast growth took place before institutional stability was achieved under the Restauración (1874-1923), and especially during the revolutionary years (1868-1874).

⁶⁰ Bruce Bueno de Mesquita and Hilton L. Root, “When Bad Economics is Good Politics”, in *Governing for Prosperity*, Bruce Bueno de Mesquita and Hilton L. Root, eds. (New Haven, 2000), 7.

has shown that there were transfers of surplus from one colony to another (*situados*)⁶¹. Independence led to the abolition of two major sources of income of the colonial administration- the Indian tribute tax (levied on all heads of households in Indian towns) and mining taxes (10 percent duty levied on all silver produced). This implied a nominal reduction of potential income of the state by almost 30%- at the levels current in the late colonial period⁶². Instability paralleled public debt growth leading arguably to crowding out private investment.⁶³

In an assessment of macroeconomic consequences of Mexican independence, Richard and Linda Salvucci proposed to distinguish between the short run effects of independence: the civil war of the 1810s subverted trade, destroyed property and productive assets and absorbed labor causing output to decline by 50 percent; and its long run effects: militarism and political turmoil altered government spending and the composition of expenditure during the 1830s-1840s, but output did not necessarily fall but it would have affected long-term growth negatively through lower investment.⁶⁴

The case of the other main center of Spanish empire, Peru, points into a similar direction. Independence took place, however, under different circumstances: foreign republican armies defeated royalist elites. Alfonso Quiroz posits that, as in Mexico, the republican state, under chronic fiscal deficit, increased taxation on mining making its recovery difficult. War destruction of fixed capital, fiscal mismanagement (foreign debt, public expenditure) and default together with political turmoil had a negative impact on the economy. Independence, in the end, did not deliver the conditions for

⁶¹ Marichal, *La bancarrota del virreinato*, 48-52.

⁶² Marichal and Carmagnani, “From Colonial Fiscal Regime to Liberal Financial Order”, 298.

⁶³ Richard J. Salvucci and Linda K. Salvucci, “Las consecuencias económicas de la independencia mexicana”, in *La independencia americana: consecuencias económicas*, Leandro Prados de la Escosura and Samuel Amaral, eds. (Madrid, 1993), 30-53.

⁶⁴ Salvucci and Salvucci, “independencia mexicana”, 45-7.

sustained economic growth⁶⁵. Quiroz poses the counterfactual proposition that had independence delayed until 1850 might have implied much lower transition costs than those actually suffered Peru⁶⁶.

In another area of large indigenous population, Central America, political instability and war affected the economy, including the destruction of capital, obstacles to trade and transport, and increasing uncertainty for investors, while the government forced loans from merchants⁶⁷. The prolonged transition to private property surely introduced uncertainty that delayed investment in land improvement and increased transaction costs⁶⁸.

Chile and Brazil behaved differently since these countries managed to create institutions that protected groups from aggression and expropriation though they failed to achieve it through the promotion of political competition and cooperation among sub-national administrative entities⁶⁹. Colombia, in turn, was successful in improving the colonial tax regime and, by 1850, had a much more

⁶⁵ Alfonso W. Quiroz, “Consecuencias económicas y financieras del proceso de la independencia en el Perú, 1800-1850”, in *La independencia americana: consecuencias económicas*, Leandro Prados de la Escosura and Samuel Amaral, eds. (Madrid, 1993), 124-146.

⁶⁶ Quiroz, “la independencia en el Perú”, .146.

⁶⁷ Héctor Lindo-Fuentes, “Consecuencias económicas de la independencia en Centroamérica”, in *La independencia americana: consecuencias económicas*, Leandro Prados de la Escosura and Samuel Amaral, eds. (Madrid, 1993), 54-79.

⁶⁸ The complexity of land institutions inherited from the colonial period should be taken into account, in particular, haciendas, ejidos and communal lands with ill defined borders, and Indian communities that linked communal ownership and group identity.

⁶⁹ Marcelo de Paiva Abreu and Luiz A. Corrêa do Lago, “Property Rights and Fiscal Systems in Brazil. Colonial Heritage and the Imperial Period”, in *Transferring Wealth and Power from the Old to the New World. Monetary and Fiscal Institutions in the 17th through the 19th Centuries*, Michael D. Bordo and Roberto Cortés-Conde, eds. (Cambridge, 2001), 327-377; North, Summerhill and Weingast, “Order, Disorder”, 40.

fair (head tax on Indians, taxes on public employees and *alcabalas* –a tax on all sales of domestic production- were eliminated), efficient (customs taxes mainly on imports) and neutral fiscal system⁷⁰. As Jaramillo, Meisel and Urrutia put it, “the absence of pre-Columbian structures of long-standing, .. plus a very rugged topography . . . resulted in an inability of the state to control the economy”⁷¹.

The experience in areas of low indigenous populations such as the River Plate was somewhat different. Samuel Amaral shows how Buenos Aires economy profited from the disappearance of a fiscal system that created disincentives for productive activities. Stable political institutions that allowed contract enforcement were introduced⁷².

The colonial empire provided protection (security and justice) at a cost not too high to the different parts of the Viceroyalty of River Plate. With independence, new providers of protection emerged but with lower capacity than the metropolis. After 1810, local powers provided the local demand of protection within their limited resources (the disappearance of the army limited the extension of the protection service to remote areas). Rosas dictatorship restricted property and free trade, but lack of political freedom did not imply, however, total suppression of economic freedom. In the interior provinces the principles of economic freedom were not easily accepted. Only in the 1853 constitution, national organization on the basis of economic freedom was widely accepted while its enforcement took another thirty years.

⁷⁰ Jaime Jaramillo Uribe, Adolfo Meisel and Miguel Urrutia, “Continuities and Discontinuities in the Fiscal and Monetary Institutions of New Granada, 1783-1850”, in *Transferring Wealth and Power from the Old to the New World. Monetary and Fiscal Institutions in the 17th through the 19th Centuries*, Michael D. Bordo and Roberto Cortés-Conde, eds. (Cambridge, 2001), 414-450.

⁷¹ Jaramillo, Meisel and Uribe, “Continuities and Discontinuities”, 417.

⁷² Amaral, “Del mercantilismo a la libertad”, 204. I draw on Amaral on the following paragraph.

The provinces of the Viceroyalty of River Plate failed to devise an incentive structure that would keep them voluntarily united under a single government and could take advantage of economies of scale in the provision of defense and justice, reducing transaction costs and encouraging economic development, as the separation of Uruguay and Paraguay revealed. Military threats and trade blockades had long lasting economic and political consequences on Paraguay. They led, according to Mario Pastore, to public finance crisis and economic contraction and to the political demise of proponents of more representative governments and freer trade while gave rise to political absolutism and redistribution of property towards the state⁷³. Economic activity in the three decades following independence fell below the levels reached in the late colonial period.

Buenos Aires profited more than the interior provinces from independence: new financial institutions, new currency, territorial expansion and livestock production, in a nutshell, political stability and economic growth, while in the interior stagnation and political instability remained until 1861.

To sum up, the qualitative evidence provided here is far from conclusive and its results vary from country to country. Transaction costs increased after independence as political and economic institutions were through a period of turmoil and re-definition. On the whole, it seems that only by mid-nineteenth century the gains derived from releasing the fiscal burden overcame the costs from an increase in governmental (including military) expenses that went parallel to poor definition and enforcement of property rights. The promising line of research initiated on Colombia by Jaramillo, Meisel and Urrutia may render, if extended to other Latin American countries, a more optimistic assessment of the welfare consequences of establishing new fiscal institutions after independence.

⁷³ Mario H. Pastore, “Crisis de la Hacienda pública, regresión institucional y contracción económica: consecuencias de la independencia en Paraguay, 1810-1840”, in *La independencia americana: consecuencias económicas*, Leandro Prados de la Escosura and Samuel Amaral, eds. (Madrid, 1993), 164-200.

The release of the trade burden imposed by the colonial system would allow the new Latin American countries to have access to expanding world commodity and factor markets. Coatsworth reckoned that the trade burden represented up to 3 percent of GDP in New Spain, again a significantly higher figure than the one estimated for the Thirteen North American Colonies, but no similar guesstimate is available for other parts of Spanish empire⁷⁴. Independence would permit direct trade between the new Latin American republics and Europe and North America and it represented a reduction in transportation and commercialization costs that, *ceteris paribus*, would increase the volumes traded. However, in the decades following independence warfare and political instability made the adjustment to the new international trade regime difficult. Bulmer-Thomas stresses that, over the nineteenth century, the export sector was not large enough to pull along domestic economies in which non-tradeables represented a large proportion of output and its productivity was very low⁷⁵.

The role of trade in Latin America's economic performance has been revisited by each new school of thought. Neoclassical trade theory predicts that trade liberalization after independence would allow Latin American countries to specialize along the lines of comparative advantage. In land abundant countries, as most of the nations in Latin America were at the time, specialization in primary produce would be expected. Paraphrasing Ronald Findlay, one of the consequences of getting rid of the trade burden for Latin America, would be to open up "a new 'frontier' where land could be extended . . . at a rising cost in terms of other real resources"⁷⁶. Heckscher-Ohlin model predicts natural resources, as the

⁷⁴ Coatsworth, "Obstacles to Economic Growth", 84.

⁷⁵ Bulmer-Thomas, *Economic History of Latin America*, chapter 5.

⁷⁶ Ronald Findlay, "International Trade and Factor Mobility with an Endogenous Land Frontier. Some General Equilibrium Implications of Christopher Columbus", in *Theory, Policy and Dynamics in International Trade*, Elhanan Helpman and J. Peter Neary, eds. (Cambridge, 1993), 47.

abundant factor, to be intensively used and, as a result, an increase of its relative price in terms of labor. This implies, in the Stolper-Samuelson extension of Heckscher-Ohlin model, that in so far land, the abundant factor, is more unequally distributed than labor, inequality would raise within national borders.

Dependentists, in turn, saw trade as a cause of increasing inequality across and within countries. Well-known views by Raúl Prebisch stress the role of declining terms of trade in the persistent retardation of Latin America⁷⁷. Hans Singer would also allocate negative implications to a hypothetical improvement in the terms of trade as it would lead to committing resources to primary production with the implicit opportunity cost of not allocating them to the domestic sector where factor returns were higher as a consequence of increasing returns and economies of scale⁷⁸. New economic geography provides another hypothesis about the role of trade in Latin American development. Paul Krugman and Anthony Venables posit that under gradually falling transportation costs, as it was the case during the 1820-1870 period, growing inequality would take place: “when transport costs fall below a critical value, a core-periphery pattern spontaneously forms, and nations that find themselves in the periphery suffer a decline in real income”⁷⁹. Then, they argue, as transport costs continue to decline, a second stage of convergence in real incomes arrive eventually, and peripheral countries gain against the Core.

To sum up, on the basis of trade theories, a series of testable hypotheses can be suggested for early nineteenth-century Latin America. We should expect a expansion of trade and, through a better

⁷⁷ Raúl Prebisch, *The Economic Development of Latin America and its Principal Problems* (New York, 1950).

⁷⁸ Hans W. Singer, “The Distribution of Gains between Investing and Borrowing Countries”, *American Economic Review. Papers and Proceedings*, 11, 2 (1950), 473-485.

⁷⁹ Paul Krugman and Anthony J. Venables, “Globalization and the Inequality of Nations”, *Quarterly Journal of Economics*, 110, 4 (1995), 859.

resource allocation, an increase in output (and, if underemployment of resources exist, trade would provide a vent for surplus). Terms of trade, according to the Prebisch school, might decline, but the opposite would occur in the light of Classical economists as Latin America exported primary goods and imported manufactured produce⁸⁰. At the same time, changes in income distribution should take place, with a tendency for within-countries inequality to rise as the reward to land, the abundant and less equally distributed factor, improves relative to labor. Lastly, a worsening of Latin American position in the world economy is predicted.

Location and economies of scale are stressed by the new economic geography. Location mattered much in the nineteenth century as the tyranny of distance was a determinant factor of trade -in particular, prior to the construction of railways (only in a large scale after 1870)-, despite the sharp reduction in ocean freight and insurance rates. Relative rather than absolute transport costs from alternative locations were what really mattered. Freight rates from Antwerp to Rio de Janeiro in 1850 were only 40 percent of those prevailing in 1820, but freight rates from Antwerp to New York fell even more, to one-fourth. Meanwhile, insurance rates were cut to one-half and to one-third for trips from Rio and Buenos Aires, respectively, to Antwerp⁸¹. Transport costs from Antwerp to Buenos Aires and Rio remained relatively stable over 1850-70 but those to Valparaiso, on the Pacific Rim, fell by 40 percent, as a consequence of the convergence of transport costs to the Pacific with those to the Atlantic façade of Latin America's Southern Cone⁸².

⁸⁰ Leandro Prados de la Escosura, "Terms of Trade and Backwardness: Testing the Prebisch Doctrine for Spain and Britain during Industrialization", Universidad Carlos III Working Papers Series 94/46 (1994) .

⁸¹ Paul Schöller, "L'évolution séculaire des taux de fret et d'assurance maritimes 1819-1940", *Bulletin de l'Institut de Recherches Économiques et Sociales*, 17, 5 (1951), 523, 540.

⁸² Schöller, "L'évolution séculaire des taux de fret", 543. Freight rates to Buenos Aires and Valparaiso became equal by 1868 when, by 1850, transport costs to Chile were, at least, one-third higher than to Buenos Aires.

Geography constraints would imply different outcomes of exposition to international trade across regions. Coastal regions, densely populated and with temperate climate would be at advantage to hinterlands in tropical areas, especially if landlocked, as migration and infrastructure development become more difficult and incentives exist for coastal economies to impose costs on them⁸³.

Landlocked economies such as Bolivia and Paraguay, the interior regions of Mexico, Colombia, Brazil and Argentina, and Andean countries such Ecuador and Peru were clearly at disadvantage of coastal regions such as those of the Southern Cone and the Caribbean prior to the railway expansion. In addition, countries on the Pacific Rim had a transport cost disadvantage over those on the Atlantic façade. Table 4 provides some insights about the overall transport costs that emphasize the importance of internal costs of transportation.

INSERT TABLE 4

We should, hence, expect wide regional discrepancies in Latin American integration into the international economy. In Mexico, independence brought an increase in openness (trade grew from 8.1% of GDP to 12.3% by 1845, according to Coatsworth), but arguably not when compared to the late colonial period, and ended laws restricting immigration and capital inflows⁸⁴. Meanwhile in Peru, mercantilist policies remained in place. After an episode of trade expansion up to the mid-1820s, fixed prices, taxation, and protectionism remained an obstacle to economic activity for decades. Only three decades later the stimulus of the international demand (the guano boom) opened the country up⁸⁵.

⁸³ Gallup, John Luke, Jeffrey D. Sachs and Andrew D. Mellinger, “Geography and Economic Development”, *International Regional Science Review*, 22, 2 (1999), 179-232.

⁸⁴ John H. Coatsworth, “The Decline of the Mexican Economy, 1800-1860”, in *América Latina en la época de Simón Bolívar. La formación de las economías nacionales y los intereses económicos europeos 1800-1850*, Reinhard Liehr, ed. (Berlin, 1989), 38.

⁸⁵ Quiroz, “la independencia en el Perú”, 134-6.

Qualitative evidence on Central America suggests stagnation, but current imports from Britain almost doubled (while its prices were practically halving) between two peaks (1826 and 1839) to decline afterwards⁸⁶. There were small incentive to trade as physical barriers implied high transport costs. Independence brought with it the break of colonial commercial networks and procedures. Links between regions of the Federation weakened as export orientation increased. Together with political instability it led to the creation of five new countries in 1839. An exogenous shock occurred as a consequence of US assimilation of California: new maritime routes through Panama isthmus, together with the Panama railroad (1855), led to a sharp decline in transport costs increasing trade and finance⁸⁷. In contrast to Spanish America, independence in Brazil did not involved a shift in the direction of trade⁸⁸. Buenos Aires economy profited from the disappearance of colonial regulation that forced it to trade through the metropolis. From re-exporting silver from Alto Peru Buenos Aires became an economy exporting livestock products. The main consequence of independence was adding up new lands to cultivation and opening up to foreign trade⁸⁹.

Table 5 provides current values of exports normalized by population. Though figures expressed at current prices preclude over time comparisons, they allow us to test the hypothesis of an uneven distribution of post-independence trade in Latin America for different points in time. As predicted, location conditioned the importance of trade with the Southern Cone and the Caribbean ahead of the rest. The relative dispersion of per capita exports declined, however, over the whole

⁸⁶ Lindo-Fuentes, “la independencia en Centroamérica”, 60.

⁸⁷ Lindo-Fuentes, “la independencia en Centroamérica”, 65-6.

⁸⁸ Stephen H. Haber and Herbert S. Klein, “Consecuencias económicas de la independencia brasileña”, in *La independencia americana: consecuencias económicas*, Leandro Prados de la Escosura and Samuel Amaral, eds. (Madrid, 1993), 153-8.

⁸⁹ Amaral, “Del mercantilismo a la libertad”, 208.

considered period⁹⁰. Evidence on capital inflows per head from Britain, the main investing country in Latin America, though exhibiting a different country pattern⁹¹, confirms the uneven integration of Latin American countries in international commodity and factor markets⁹².

INSERT TABLE 5

In order to ascertain the extent to which Latin American integration into the international economy took place we would need to deflate the nominal values presented in Table 5. British investment in real terms can be obtained by deflating it with the price index of the United Kingdom's exports, since those investments were used, at least, in part, to purchasing capital goods from Britain. Again, deflating current exports by the price of British exports provides a measure of the purchasing power of Latin American exports as the U.K. was the main trading partner of the new republics. Over forty years, the purchasing power per Latin American inhabitant of both exports (1830-70) and British investment (1825-65) increased noticeably, at an average annual rate of growth of 1.5 and 2.1 percent, respectively. Exports accelerated after 1850 and its *per capita* rate of growth moved up from 1.2 in 1830-50 to 1.8 over 1850-70 but British investment per head only took off after 1865, reaching a yearly rate of 9.1 percent during 1865-75, a phenomenon linked to government loans and, to a less

⁹⁰ As measured by the coefficient of variation of the relevant set of countries for each pair of adjacent time observations.

⁹¹ The correlation coefficient between per capita exports and British investment is 0.38 in 1870-75.

⁹² British investment amounted to more than three times French investments and more than four times U.S. investments in Latin America by 1913 (computed from figures in Carlos Marichal, ed. *Las inversiones extranjeras en América Latina, 1850-1930. Nuevos debates y problemas en historia económica comparada*. (México, 1995), Appendix) The importance of British investment relative to those from other countries being higher in earlier decades.

extent, associated to the shift of foreign investment toward railroads construction and public utilities⁹³. On average, deflated British investment per head grew at 3.5 percent over 1825-75.

INSERT TABLE 6

National estimates of countries' purchasing power of exports in terms of imports, also known as income terms of trade, confirm our findings. Cuba's income terms of trade improved substantially (277 by 1867, 1826=100) due to supply increases in sugar exports⁹⁴. In Mexico, no trend was exhibit over 1828-1851 but, then, a sharp improvement took place up to the 1880s⁹⁵. In Colombia, real exports *per capita* doubled between the late 1830s and 1880, but probably did not recover the 1800 level until 1870, while income terms of trade trebled between the 1830's and the 1860's⁹⁶. In Brazil, Real exports *per capita* multiply by three between the 1820s and the 1850s and by four between the 1820s and 1870s. Leff shows a substantial improvement for Brazilian income terms of trade: at an annual trend rate of 4.2 percent over 1822-1849 (2.8 percent in *per capita* terms)⁹⁷. Argentina also experienced a remarkable increase in the quantity and the purchasing power of her exports⁹⁸. Chilean

⁹³ Irving Stone, "British Direct and Portfolio Investment in Latin America before 1914", *Journal of Economic History*, 37, 3 (1977), 694.

⁹⁴ Linda K. Salvucci and Richard J. Salvucci, "Cuba and the Latin American Terms of Trade: Old Theories, New Evidence", *Journal of Interdisciplinary History*, 31, 2 (2000), 197-222.

⁹⁵ Richard J. Salvucci, "The Mexican Terms of Trade, 1825-1883: Calculations and Consequences" (1993) (mimeo).

⁹⁶ José Antonio Ocampo, *Colombia y la economía mundial 1830-1910*, (Bogotá, 1984), 89, 98.

⁹⁷ Leff, *Underdevelopment and Development*, 83.

⁹⁸ Carlos Newland, "Exports and Terms of Trade in Argentina, 1811-1870", *Bulletin of Latin American Research*, 17, 3 (1998), 409-416.

real *per capita* exports, in turn, multiplied by 7 between independence and 1870⁹⁹. In turn, preliminary computations for Latin American income terms of trade with Britain suggest that they multiply by more than 5 over the three decades after independence, and up to 12 times if the whole period 1825-75 is considered.

INSERT TABLE 7

In the trade literature, the net barter terms of trade, the ratio of export to import prices that provide a measure of the purchasing power per unit of exports, have been depicted as a “productivity index” of trade. Recent research provides estimates of net barter terms of trade major Latin American countries (Table 8). In Mexico the net barter terms of trade experienced a moderate improvement between 1828 and 1881 (at 1.4% per year) and probably added 3% to GDP by 1860¹⁰⁰. Brazilian purchasing power per unit of exports improved by three-fourths between 1826-30 and 1876-80¹⁰¹. José Antonio Ocampo shows for Colombia that the net barter terms of trade improved as much as Brazil between the late 1830s and 1880¹⁰². Linda and Richard Salvucci, on the basis of Gootenberg’s data were able to establish that the net barter terms of trade of Peru were 47 percent higher in the early 1850s than in the 1830s¹⁰³. For Argentina, Carlos Newland shows an improvement that peaked in the

⁹⁹ Díaz, José, Rolf Lüders and Gert Wagner, “Economía chilena 1810-1995: evolución cuantitativa del producto total y sectorial”. Pontificia Universidad Católica de Chile, Instituto de Economía, Documento de Trabajo n° 186 (1998).

¹⁰⁰ Salvucci, “The Mexican Terms of Trade”.

¹⁰¹ Leff, *Underdevelopment and Development*, 82.

¹⁰² Ocampo, *Colombia y la economía mundial*, 93.

¹⁰³ Linda Salvucci and Richard Salvucci, “Cuba and the Latin American Terms of Trade”, 216. Paul Gootenberg, *Between Silver and Guano. Commercial Policy and the State in Postindependence Peru*, (Princeton, 1989).

late 1850s¹⁰⁴. Demand for exports increased due to international trade expansion and European industrialization. The growth of inputs used by the pastoral economy and the productivity increase are behind supply expansion. Newland suggests that the domestic terms of trade, that is, those perceived by the Argentine population, should have improved more dramatically than the international terms of trade as independence allowed to trade directly in world markets, colonial tariffs were repealed and the new 1820s tariffs were much lower. Lastly, transport costs and the increase in the scale of trade helped reduce margins in international trade. Only Cuba provides the exception as her net terms of trade deteriorated between 1826 and 1866 (by 50 percent) and when adjusted for productivity changes in the export sector (the so called single factorial terms of trade) no trend appears between 1826 and 1846 to experiment, then, a decline up to 1862 (by 61 percent)¹⁰⁵.

INSERT TABLE 8

Evidence tends, therefore, to reject the old view of deteriorating terms of trade that hindered Latin American growth precisely at the time (1820s-1870s) when large international disparities in income began to emerge. On the combined evidence provided by the evolution of the relative price of exports (Table 8) and the purchasing power of total exports (Tables 6 and 7) the idea of immiserizing growth can be rejected for most of Spanish America and for Brazil¹⁰⁶.

On the whole, it seems warranted to say that the release of the colonial trade burden had net gains for the economies of Latin America as the evolution of quantities and prices of exported goods

¹⁰⁴ Newland, "Exports and Terms of Trade in Argentina", 412.

¹⁰⁵ Linda Salvucci and Richard Salvucci, "Cuba and the Latin American Terms of Trade", 204-7.

¹⁰⁶ That is, when an increase in production depresses the price of exports relative to imports so much that the gains in output are swamped by the loss of purchasing power for imports. Cf. Jadish Bahgwati, "Immiserizing Growth: A Geometric Note", *Review of Economic Studies*, 25, 3 (1957-58), 201-205, for a theoretical discussion of the concept.

suggests. Although trade did not have the strength to pull from the economy as a whole, in a classical episode of export-led growth, it can be argued that, when it was not hindered by geographic and institutional barriers, it facilitated economic growth. Trade in Nineteenth Century Latin America, especially after 1850, seems to have been, in most national cases, a handmaiden of growth¹⁰⁷.

The opening up to the international economy has been associated to a widening of income differences within countries and across nations. No evidence is available on the former for the pre-1870 period with the exception of Argentina for which Carlos Newland and Javier Ortiz have shown that the expansion in the pastoral sector resulting from improved terms of trade increased the reward of capital and land, the most intensively used factors, while the farming sector contracted and the returns of its intensive factor, labor, declined, as confirmed by the drop in nominal wages¹⁰⁸. A redistribution of income in favor of owners of capital and land (*estancieros*) at the expense of workers took place. Williamson's findings for 1870-1914 also suggest an increase of inequality within-countries in Latin America, which confirm empirically Stolper-Samuelson theoretical predictions¹⁰⁹. The

¹⁰⁷ Cf. Irving B. Kravis, "Trade as a Handmaiden of Growth: Similarities between the Nineteenth and Twentieth Centuries", *Economic Journal*, LXXX (1970), 850-872. The export-led growth approach has been rejected by Leff and Catao for Brazil and Mexico (Leff, *Development and Underdevelopment*; Luis Catao, "The Failure of Export-Led Growth in Brazil and Mexico c. 1870-1930". University of London Institute of Latin American Studies Research Papers No. 31 (1992)) and Bulmer-Thomas, *Economic History of Latin America*, downplayed the role of trade in promoting Latin American growth. In turn, Rafael Dobado and Gustavo Marrero, "Minería, crecimiento y costes de la independencia en México", *Revista de Historia Económica*, XIX, 3 (2001), 573-611, depict colonial Mexico progress as export-led growth.

¹⁰⁸ Carlos Newland and Javier Ortiz, "The Economic Consequences of Argentine Independence", *Cuadernos de Economía*, 115 (2001), 275-290.

¹⁰⁹ Jeffrey G. Williamson, "Real Wages Inequality and Globalization in Latin America before 1940", *Revista de Historia Económica*, XVII (special issue) (1999), 101-42.

argument follows that, as natural resources were the abundant productive factor in Latin America, they were more intensively used in the production of exportable commodities. As a result, returns to land grew relatively to labor's. Since the ownership of natural resources is more concentrated than that of labor, income distribution tended to be skewed towards landowners and inequality rose over the decades prior to World War I.

Did Latin America fall behind?

Is the widespread perception of Latin America falling behind supported by the available evidence?, and, more closely related to the topic of this essay, Can Latin American retardation be related to the way in which independence occurred?.

Evidence on aggregate economic performance across countries shows a wide variance. In the main centers of the former Spanish empire, Mexico and Peru, war destruction of fixed capital, financial capital flight, silver drain through trade deficit, mining depression, together with fiscal mismanagement and political turmoil, all contributed negatively to growth. Public debt, it has been suggested, crowded investment.

A widely accepted perception is that Mexican economic decline started already before independence and lasted until the 1870's. According to Coatsworth's guesstimates, output fell by 2 percent and *per capita* income by 21 percent (-0.5 percent yearly) between 1800 and 1845 (and -0.57 percent over 1800-1860)¹¹⁰. Maddison estimates are close to Coatsworth's figures for Mexico's real GDP per head¹¹¹. Richard and Linda Salvucci suggested, alternatively, that, in real terms, output grew by 30 percent over 1800-1840 while population did it by 9 percent, implying that output per head increased by

¹¹⁰ Coatsworth, "Decline of Mexican Economy", 31, 41. This view is shared by Enrique Cárdenas, "A Macroeconomic Interpretation of Nineteenth-Century Mexico", in *How Latin America Fell Behind. Essays on the Economic Histories of Brazil and Mexico, 1800-1914*, Stephen Haber, ed. (Stanford, 1997), 65-92.

¹¹¹ Maddison, *Monitoring the World Economy 1820-1992* (Paris, 1995), 143.

21 percent or 0,5 percent annually¹¹². This revisionist picture has been rejected by Richard Salvucci who now claims that prolonged stagnation or, even, decline of *per capita* income are better depictions of Mexican economic performance over 1800-1840¹¹³.

The causes of the long depression of the Mexican economy are the subject of an intense historical debate¹¹⁴. Among the reasons pointed for sluggish growth the decline in silver production, that did not recover until the 1860s, is the main one. The fall in silver output led to a drop in employment and expenditure and to a contraction of the money supply. Abandonment and flooding of mines and the high price of mercury, used to refine silver, lie behind the collapse of mining. Rafael Dobado and Gustavo Marrero have argued that the slow recovery of silver output, both a consequence of the economic policies followed in post-independence Mexico and of the changes in the international market for mercury, hindered severely Mexican economic growth¹¹⁵. According to Dobado and Marrero, Spain, a major world supplier, did no longer supply Mexican mining at prices below those prevailing internationally. Mexico had to purchase mercury in the international market while prices kept raising during the early nineteenth century.

¹¹² Richard and Linda Salvucci, "Las consecuencias económicas de la independencia mexicana", 41.

¹¹³ Richard J. Salvucci, "Mexican National Income in the Era of Independence, 1800-1840", in *How Latin America Fell Behind. Essays on the Economic Histories of Brazil and Mexico, 1800-1914*, Stephen Haber, ed. (Stanford, 1997), 234-5.

¹¹⁴ Cárdenas, "A Macroeconomic Interpretation of Nineteenth-Century Mexico"; Coatsworth, "Decline of Mexican Economy". More recently, Dobado and Marrero, "Minería, crecimiento y costes de la independencia en México".

¹¹⁵ Dobado and Marrero, "Minería, crecimiento y costes de la independencia en México", 598-607. The reduction of backward linkages and in labor productivity are among the negative effects of silver mining decline on aggregate performance, according to these authors.

In Peru, as in Mexico, the republican state, under chronic fiscal deficit, increased taxation on mining. Silver mining also declined until the 1840s. High mercury prices and interest rates, obsolete technology, and Government taxes all contributed to difficult the recovery of mining¹¹⁶. In short, independence at the core of the colonial empire did not deliver the conditions for sustained economic growth.

Slavery economies offer a distinct behavior as they did not undergo a deep political and institutional transformation. Cuba remained loyal to Spain and experienced sustained progress until the 1860s¹¹⁷. Brazil's economy was characterized by low rates of growth, free trade and limited structural change while remaining politically stable. According to Leff, *per capita* income rose at a moderate pace during the nineteenth century¹¹⁸. Economies in the Southern Cone show, in turn, sustain economic progress after independence. Chilean GDP per head grew at 0.9 per cent over 1810-60, while population grew at 1.6 percent annually, with most of the improvement in *per capita* income taking place after 1830¹¹⁹. In Argentina, all economic indicators suggest a fast growth led by the Buenos Aires region. Increases in population and labor force, urbanization, and a significant rise of total factor productivity in livestock production are among the distinctive features of post-independence Rio de la Plata¹²⁰.

¹¹⁶ Quiroz, "la independencia en el Perú", 129-33, 143.

¹¹⁷ Pedro Fraile, Richard J. Salvucci, and Linda K. Salvucci, "El caso cubano: exportaciones e independencia", in *La independencia americana: consecuencias económicas*, Leandro Prados de la Escosura and Samuel Amaral, eds. (Madrid, 1993), 80-101.

¹¹⁸ Leff, *Underdevelopment and Development*, I, 33.

¹¹⁹ Díaz, Lüders and Wagner, "Economía chilena 1810-1995".

¹²⁰ Carlos Newland, "Economic Development and Population Change: Argentina, 1810-1870", in *Latin America and the World Economy Since 1800*, John H. Coatsworth and Alan M. Taylor, eds. (Cambridge, MA, 1998), 207-

INSERT TABLE 9

How does Latin America compare to other countries? Did Latin America, as it is stressed in the literature, fall behind before 1870?

Maddison's international set of real GDP per head estimates provides the opportunity to place Latin America into a wider comparative framework¹²¹. A first glance at the evolution of *per capita* income levels throughout the nineteenth and twentieth centuries suggests that, relative to the United States, three distinctive phases appear: a first one of decline up to 1870 for the three countries for which guesstimates are available (Brazil, Chile, and Mexico), followed by relative stability from 1870 to 1950, for the six main Latin American countries for which information exists, and, then, a decline till the present, that would only take place since 1973 if Latin America as a whole is considered¹²². Thus,

222.; Newland, "Exports and Terms of Trade"; Carlos Newland and Barry Poulson, "Purely Animal: Pastoral Production and Early Argentine Economic Growth 1825-1865", *Explorations in Economic History*, 35, 3 (1998), 325-45.

¹²¹ Alternative and more comprehensive estimates are provided for Latin America by Pablo Astorga and Valpy Fitzgerald, "Statistical Appendix", in Rosemary Thorp, *Progress, Poverty and Exclusion. An Economic History of Latin America in the 20th Century* (Washington, 1998), but do not include other parts of the world. Maddison's estimates have a wider country coverage and have been preferred here in spite of its conjectural nature for many developing countries in the past and the index number problem derived from using a fixed 1990 benchmark for space and time comparisons (Cf. Prados de la Escosura, "International Comparisons").

¹²² A comparison between Latin America's position relative to the US in Maddison's estimates (Table 9) and Astorga and Fitzgerald (Table 1) show discrepancies as in the latter the decline occurred after 1980 and the relative position was similar in 1950 and 1995. Such discrepancies derive not only from the country coverage of each estimates but from the use of different single benchmarks, 1970 in the case of Astorga and Fitzgerald and 1990 in the case of Maddison.

in the binary comparison with the USA, only the pre-1870 and the post-1950 periods can be deemed responsible for today's Latin American retardation.

If a country by country analysis is preferred for the nineteenth century, then, the scant estimates available suggests that while Mexico and Brazil fell behind the U.S.A. over 1820-70, this was not the case of Chile (Table 9)¹²³. Between 1870 and 1913, Latin American national experiences varied widely, with Mexico and the Southern Cone economies catching up, while slave economies, Brazil and Cuba, were falling behind¹²⁴.

The assessment of Latin American performance has been carried out, so far, using the U.S. as the relevant benchmark. The fact that, over the nineteenth century, most countries, including those of Western Europe, fell behind when measured by American standards renders the U.S. yardstick questionable.

When, instead, Latin America's performance is confronted to those of other regions of the world, the picture changes dramatically¹²⁵. Firstly, over 1820-70, the decline relative to the U.S. for the three countries for which some reliable information exists (Brazil, Chile and Mexico), is deeper than in Western Europe but similar to those of Southern and Eastern Europe and of the Russian Empire and much milder than in Africa and Asia. So even though her position worsened to the U.S. and Western

¹²³ Estimates are based on guesses such as Angus Maddison's *Monitoring the World Economy, 1820-1992*. (Paris, 1995), 143, on Brazil, or are obtained indirectly from export and fiscal data as in the case of Chile (Díaz, Lüders and Wagner, "Economía chilena 1810-1995").

¹²⁴ Fraile, Salvucci, and Salvucci, "El caso cubano", 83, 91, 101, suggest that Cuban GDP per head stagnated in the late nineteenth century after experiencing growth over 1800-1850.

¹²⁵ Since Table 9 is constructed using the United States as 100 for each benchmark year, the comparison between Latin America and other world regions is made in relative terms to the U.S. but the use of Geary-Khamis dollars implies that a multilateral comparison is carried out regardless the country used as reference.

Europe it remained unaltered in comparison to Eastern Europe and improved to the rest of today's Third World. Then, the phase of the first globalization, 1870-1913, witnessed Latin America as the single major world region that did not worsen her position relative to the U.S.A., hence, improving vis-à-vis the rest of the world. A third phase, the early twentieth century shows again Latin America, now accompanied by the Soviet Union, as the world regions that did not yield to U.S. economic advance. The half a century since 1950 inverted the picture. Loosing grounds to the U.S. over the Golden Age (1950-73) was shared by Latin America only with India and Africa as most regions in the world experienced a process of catching up to the U.S.. Lastly, the post-1973 era, allowing for substantial income differentials, placed Latin America along Eastern Europe, the USSR (and its former members) and Sub-Saharan Africa, all of them worsening their relative position to the U.S. while Asian countries improved their own significantly.

To sum up, over the nineteenth century Latin American performance was no worse, but better, than in other parts of today's Third World and the European periphery. Conversely, the fact that her position relative to the U.S. remained mostly unaltered over the Golden Age is at odds with the catching up experience in large areas of the Periphery (Southern and Eastern Europe, Southeast Asia) where the gap with the U.S. in terms of income per head was significantly reduced and, again, Latin America under-performed relative to Asia after 1973. In other words, blaming Latin America retardation on falling behind the US over the nineteenth century is a short-sighted conclusion that tends to transpose the widely accepted view of today's Latin America under-achievement to the past.

Concluding Remarks

Disorder after independence increased transaction costs as political and economic institutions were redefined throughout a lengthy and painful process. Though qualitative evidence varies from country to country, for Latin America as a whole in the first half of the nineteenth century it is far from clear that the gains from releasing the fiscal burden more than offset the tax increase to cover

expanding governmental expenses that accompanied independence. The collapse of Spanish empire showed that its institutions, yet inefficient, helped reducing transaction costs.

The release of the colonial trade burden had, in turn, net gains for the economies of Latin America as the favorable evolution of quantities and relative prices of goods exported suggests. Trade did not have the strength to pull from the economy, as in the export-led growth model but, whenever geographic and institutional barriers did not impede it, represented a handmaiden of growth.

The opening up to the international economy has been associated to a deepening of income differences within and across countries. No evidence is available on within-countries income distribution for the pre-1870 period with the exception of Argentina where the expansion in the pastoral sector resulting from improved terms of trade increased the reward of the intensively used factors (capital and land), while the farming sector contracted and the returns of its intensive factor (labor) declined. A redistribution of income in favor of owners of capital and land took place. Williamson's findings for the four decades prior to World War I confirm the increase of inequality within Latin American countries.

Growth of real income *per capita* in Latin America was nearly 1 percent per year between independence and the eve of World War I¹²⁶. In comparative terms her performance was often better than in other parts of today's Third World and the European periphery. In the half century following independence (1820-70) real product per head grew less, probably not far below 0.5 percent per year, but her decline relative to the United States was similar to that of Southern and Eastern Europe and the Russian Empire, and much milder than in the cases of Africa and Asia. Later, in the first episode of globalization (1870-1913), Latin American GDP per head grew above 1,5 percent yearly and was

¹²⁶ Computed from Table 9 for the unweighted average of the three countries, Brazil, Chile and Mexico, for which estimates of real income per head are available.

the only world region that did not worsen her position relative to the USA and improved noticeably with respect to the rest of the world¹²⁷.

The inheritance of Spanish *Ancien Régime* institutions in Latin America as opposed to non-absolutist (post-1688) institutions in British America does not seem to be a solid argument to explain different performances any longer, especially if the scope is widened to include the post-independence performance of British (and French) former colonies in Africa and Asia. British North America appears as an exceptional example of success that cannot be used as a yardstick to measure Latin American success. No definitive answer has been provided here but it seems clear that before jumping to the usually negative conclusion about Latin America's performance in the nineteenth century a more rigorous examination is required to establish whether she exploited her growth potential after independence.

A series of questions emerge from the discussion that deserve further research. Had Latin America become independent later, at the time of the first wave of globalization, Would economic growth have been more intense and widespread?. A positive answer to this counterfactual would reinforce Christopher Platt's assertion that "domestic circumstances" shaped Nineteenth Century Latin America.

Did independence cause de-globalization in the half century between 1820 and 1870? In another chapter Luis Bértola and Jeffrey Williamson argue that the fiscal needs of the new republics, exacerbated by fighting wars, led to raising tariffs and, consequently, to isolating Latin American from world markets¹²⁸. A more important effect of the way independence occur was the destruction of the colonial customs and monetary union as it represented a serious blow to the economic integration of Latin America. Would an economically united Latin America have been more integrated into the

¹²⁷ Computed from Table for the unweighted average of the six Latin American countries for which estimates of real income per head are available.

¹²⁸ Luis Bértola and Jeffrey G. Williamson, "Globalization before 1940".

world economy? How much higher, if any, would *per capita* GDP have been under a United States of Latin America?

A systematic comparison to other post-colonial development experiences elsewhere may help assessing Latin America's achievements and shortcomings after independence. Would such an exercise bring support to John Coatsworth's idea that the long-run benefits of independence were far larger than its costs?

A final word deserves the quantitative research agenda on Latin American economic performance over 1820-1870. Trends in population, urbanization, literacy, wages, together with trade and fiscal revenues and expenditures per head are correlated with economic growth and could be reasonably reconstructed for Latin American countries. Gathering such a data set will allow us to assess economic performance across countries. Preliminary findings about literacy, urbanization and life expectancy suggest that some advances, though unevenly distributed, took place in the half a century after independence¹²⁹.

¹²⁹ Cf. Paul Bairoch, *Cities and Economic Development. From the Dawn of History to the Present* (Chicago, 1988), and Carlos Newland, "La educación elemental en Hispanoamérica: desde la independencia hasta la centralización de los sistemas educativos nacionales", *Hispanic American Historical Review*, 71, 2 (1991), 335-364.

Table 1**Relative GDP per Head in Latin America, 1900-1995**

	Latin America (1970 \$ PPP)		Latin America (USA=100)	
	Six Countries	All	Six Countries	All
1900	185		12.5	
1910	228		13.3	
1920	235		12.4	
1930	277		12.9	
1940	320		12.9	
1950	413	394	12.5	11.9
1960	521	487	13.6	12.7
1970	707	649	13.7	12.6
1980	973	884	15.4	14.0
1990	938	837	12.7	11.3
1995	990	879	12.8	11.4

Source: Pablo Astorga and Valpy Fitzgerald, "Statistical Appendix", in Rosemary Thorp *Progress, Poverty and Exclusion. An Economic History of Latin America in the 20th Century* (Washington, 1998), 353.

Table 2

Per Capita GDP in Latin American, Asian and African Countries at the time of Independence
(1990 international Geary-Khamis Dollars)

c.1776		
	U.S.A.	1,166
c.1820		
	Brazil	646
	Mexico	759
	<i>average</i>	703
1950		
	Afghanistan	645
	Bangladesh	540
	Cambodia	518
	India	619
	Laos	613
	Myanmar	396
	Pakistan	643
	Vietnam	658
	Indonesia	840
	<i>average</i>	608
1960		
	Botswana	403
	Chad	569
	Gambia	650
	Kenya	726
	Mali	535
	Rwanda	656
	Tanzania	433
	Togo	698
	Uganda	713
	Cameroon	832
	Nigeria	869
	Sierra Leone	856
	<i>average</i>	662

Sources: Angus Maddison, *The World Economy. A Millennial View* (Paris, 2001); US, figure for 1820 backasted to 1776 with growth rates taken from Peter C. Mancall and Thomas Weiss, "Was Economic Growth Likely in Colonial British North America?", *Journal of Economic History*, 59, 1, pp. 17-40. A lower figure, \$ 912 would be obtained with Maddison's own conjectures.

Table 3**Comparative Geography and Historical Demography of Latin America**

	Mean annual temperature °C	% Land area within 100 km of sea coast	Absolute value of latitude	Adult Mortality rates in early 19th century	Urbanization Rate in 1500	Population density in 1500
Argentina	17.1	0.123	0.378	68.9	0.0	0.11
Bolivia	21.5	0.000	0.189	71.0	10.6	0.83
Brazil	23.7	0.093	0.111	71.0	0.0	0.12
Chile	13.4	0.662	0.333	68.9	0.0	0.80
Colombia	22.5	0.160	0.044	71.0	7.9	0.96
Costa Rica	25.1	1.000	0.111	78.1	9.2	1.54
Dominican Republic	25.6	1.000	0.211	130.0	3.0	1.46
Ecuador	19.1	0.368	0.222	71.0	10.6	2.17
El Salvador	23.6	1.000	0.150	78.1	9.2	1.54
Guatemala	21.7	0.425	0.170	71.0	9.2	1.54
Honduras	25.4	0.669	0.167	78.1	9.2	1.54
Mexico	19.0	0.373	0.256	71.0	14.8	2.62
Nicaragua	26.6	0.633	0.144	163.3	9.2	1.54
Panama	27.5	1.000	0.100	163.3	9.2	1.54
Paraguay	23.0	0.000	0.256	78.1	0.0	0.50
Peru	20.5	0.173	0.111	71.0	10.5	1.56
Uruguay	18.4	0.312	0.367	71.0	0.0	0.00
Venezuela	24.8	0.244	0.089	78.1	0.0	0.44
<i>Central America & Caribbean</i>	<i>25.1</i>	<i>0.818</i>	<i>0.150</i>	<i>108.8</i>	<i>8.3</i>	<i>1.53</i>
<i>South America</i>	<i>20.5</i>	<i>0.196</i>	<i>0.209</i>	<i>72.1</i>	<i>3.2</i>	<i>0.59</i>
<i>Southern Cone</i>	<i>16.3</i>	<i>0.366</i>	<i>0.359</i>	<i>69.6</i>	<i>0.0</i>	<i>0.30</i>
Latin America	22.1	0.457	0.189	86.3	6.3	1.16
Non-Spanish West Indies	26.6	1.000	0.206	130.0	3.0	2.97
Asia	26.1	0.554	0.160	74.2	6.9	10.17
Northern Africa	20.0	0.283	0.336	71.8	14.7	32.06
Sub-Saharan Africa	25.6	0.170	0.112	567.5		
United States	11.2	0.112	0.422	15.0	0.0	0.09
Canada	-0.2	0.021	0.667	16.1	0.0	0.02
Australia & New Zealand	16.9	0.579	0.378	8.6	1.5	0.20

Sources: John W. McArthur and Jeffrey D. Sachs , “Institutions and Geography: Comment on Acemoglu, Johnson and Robinson (2000)”, NBER Working Paper Series 8114 (2001); Daron Acemoglu, Simon Johnson and James A. Robinson , “Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution”, NBER Working Papers Series 8460 (2001).

Table 4**Transport Costs in Latin America c. 1842**

	Average Freight from England (Sterling per ton)	Internal Transport Cost from port to the capital (shilling per 200 lb.)
Peru	4	2
Mexico	2.5	27.5
Uruguay	2	0
New Granada	2.5	90
Bolivia	4.5	38.5
Ecuador	4.5	30
Chile	3.75	4.75
Argentina	2	0
Venezuela	3	8.5

Source: Celia W. Brading, “Un análisis comparativo del costo de la vida en diversas capitales de Hispanoamérica (1842)”, *Boletín Histórico de la Fundación John Boulton*, 20 (1969), 229-266.

Table 5

Per Capita Exports and Per Capita British Investment
(US dollars at current prices)

	Exports			British Investment		
	1830	1850	1870	1825	1865	1875
Argentina	2.0	10.3	16.5	9.2	8.4	51.6
Bolivia		5.5	8.6		0.0	5.4
Brazil	4.4	5.0	8.6	4.9	10.9	14.1
Chile	4.5	7.8	14.2	4.9	8.6	23.4
Colombia	2.5	1.9	6.6	28.5	13.4	6.9
Costa Rica		11.4	21.2		0.0	117.3
Cuba	17.7	22.2	45.9	0.0	10.4	5.1
Dominican Republic		3.4	5.0		0.0	18.7
Ecuador		2.0	4.1		8.8	8.8
El Salvador		3.2	7.3		0.0	0.0
Guatemala		1.7	2.5		0.4	2.4
Honduras		4.9	3.6		0.0	99.1
Mexico	1.8	3.2	2.3	6.2	14.1	15.0
Nicaragua		3.7	3.5		0.6	1.8
Paraguay		1.3	7.2		0.0	33.7
Peru	0.7	3.7	10.1	7.4	7.6	65.2
Uruguay		54.9	46.6		24.0	106.1
Venezuela	3.0	3.3	5.2	0.0	13.5	20.2
TOTAL	6.4	5.2	8.9	5.8	9.5	20.4

Sources: exports, Paul Bairoch and Bouda Etemad (1985), *Structure par produits des exportations du Tiers-Monde 1830-1937* (Genève, 1985), for 1830; Victor Bulmer-Thomas, *The Economic History of Latin America since Independence* (Cambridge, 1994), for 1850 and 1870; Irving Stone, "British Direct and Portfolio Investment in Latin America before 1914", *Journal of Economic History*, 37, 3 (1977), 690-722.

Table 6

Per Capita Purchasing Power of Total Exports and British Investment
(US dollars at constant prices)

	Exports			British Investment		
	1830	1850	1870	1825	1865	1875
Argentina	2.0	15.9	21.5	9.2	12.0	84.9
Bolivia		8.4	11.2		0.0	8.9
Brazil	4.4	7.7	11.1	4.9	15.5	23.1
Chile	4.5	12.1	18.4	4.9	12.2	38.6
Colombia	2.5	2.9	8.6	28.5	19.0	11.4
Costa Rica		17.6	27.5		0.0	193.1
Cuba	17.7	34.3	59.6	0.0	14.8	8.4
Dominican Republic		5.3	6.4		0.0	30.7
Ecuador		3.0	5.3		12.4	14.4
El Salvador		5.0	9.4		0.0	0.0
Guatemala		2.6	3.2		0.6	4.0
Honduras		7.6	4.7		0.0	163.1
Mexico	1.8	4.9	3.0	6.2	20.1	24.7
Nicaragua		5.7	4.5		0.9	2.9
Paraguay		2.0	9.3		0.0	55.4
Peru	0.7	5.8	13.1	7.4	10.8	107.4
Uruguay		84.8	60.5		34.1	174.7
Venezuela	3.0	5.0	6.7	0.0	19.1	33.2
TOTAL	6.4	8.1	11.6	5.8	13.5	33.6

Note: Current values deflated with British export price index. Exports and investment at 1830 prices and 1825 prices, respectively.

Sources: Table 5 and Brian R. Mitchell, *British Historical Statistics* (Cambridge, 1988).

Table 7

Purchasing Power of Latin American Exports to Britain, 1794/6-1874/6
[1824/6=100]

Current Value of Latin American Exports to Britain (c.i.f.)		Implicit Price	Imlah's Price		Income Terms of Trade	
(sterling)	Index	Of UK Exports	of UK Exports			
[I]	[II]	[III]	[IV]	[V]	[VI]	
				[II/III]	[II/IV]	
1794/6	275	8.8	166.7	164.7	5.3	5.4
1804/6	1270	40.8	197.2	189.5	20.7	21.6
1814/6	6227	200.3	149.6	154.9	133.9	129.3
1824/6	3109	100.0	100.0	100.0	100.0	100.0
1834/6	3380	108.7	71.6	77.9	151.8	139.6
1844/6	4905	157.8	53.6	59.3	294.3	266.1
1854/6	9698	311.9	53.5	54.8	583.1	569.1
1864/6	22933	737.6		70.4		1048.0
1874/6	24133	776.2		60.8		1277.5

Sources: Ralph Davis, *The Industrial Revolution and British Overseas Trade* (Leicester, 1979), col.(I), 1794/6-1854/6, col (III);
 Brian R. Mitchell, *British Historical Statistics* (Cambridge, 1988), col. (I), 1864/6-1874/6, col. (IV).

Table 8

Net Barter Terms of Trade of Latin American Countries, 1811/15-1876/80
[1836/40=100]

	Cuba	Mexico	Colombia	Brazil	Argentina
1811/15					61
1816/20					76
1821/25					115
1826/30		108	84		94
1831/35		100	95		107
1836/40		100	100	100	100
1841/45		102	98	124	97
1846/50		86	101		109
1851/55		69	106		120
1856/60		62	100	157	115
1861/65		53	79		120
1866/70		56	94	127	89
1871/75		57	104	139	147
1876/80		57	116	178	173

Sources: Cuba, Linda K. and Richard J. Salvucci, "Cuba and the Latin American Terms of Trade: Old Theories, New Evidence", *Journal of Interdisciplinary History*, 31, 2 (2000), 197-222; Mexico, Richard J. Salvucci, "The Mexican Terms of Trade, 1825-1883: Calculations and Consequences" (1993) (mimeo); Colombia, José Antonio Ocampo, *Colombia y la economía mundial 1830-1910* (Bogotá, 1984); Brazil, Nathaniel H. Leff, *Underdevelopment and Development in Brazil* (London, 1982); Carlos Newland, "Exports and Terms of Trade in Argentina, 1811-1870", *Bulletin of Latin American Research*, 17, 3 (1998), 409-416.

Table 9

Relative Levels of GDP per Head, 1820-1998 [U.S.=100]
(1990 international Geary-Khamis Dollars)

	1820	1870	1913	1950	1973	1998
Argentina		43.4	72.7	52.2	47.8	33.7
Brazil	51.4	29.2	15.3	17.5	23.3	20.0
Chile	48.3	53.0	55.6	38.6	29.9	35.7
Colombia			23.3	22.5	21.0	19.5
Cuba			68.9	35.5	19.4	7.9
Ecuador			18.1	19.8	19.3	15.2
Mexico	60.4	27.6	32.7	24.7	29.0	24.3
Peru			19.6	23.7	23.7	13.4
Uruguay		82.0	62.4	48.7	29.8	30.4
Venezuela		23.3	20.8	78.0	63.7	32.8
Latin America (6)	53.4*	43.1	43.2	43.3	37.2	29.5
Latin America (10)			38.9	36.1	30.7	23.3
Latin America				26.7	27.1	21.2
Africa	33.3	18.2	11.0	8.9	8.2	5.0
Northern Africa			14.5	12.2	10.9	10.7
Asia	46.1	22.6	12.8	7.5	10.3	13.0
Asia (excl Japan)	45.7	22.2	12.1	6.6	7.4	10.7
China	47.7	21.7	10.4	4.6	5.0	11.4
India	42.4	21.8	12.7	6.5	5.1	6.4
Rest of Asia	44.9	24.7	15.0	9.7	12.4	13.7
Eastern Europe	50.6	35.6	28.8	22.2	29.9	20.0
Former USSR	54.8	38.6	28.1	29.6	36.3	14.2
Western Europe	98.0	80.7	65.5	48.0	69.1	65.6
United States	100.0	100.0	100.0	100.0	100.0	100.0
Per Capita GDP Level (1990 \$)						
United States	1257	2445	5301	9561	16689	27331

* Only Brazil, Chile and Mexico are included in 1820.

Source: Angus Maddison, *The World Economy, A Millennial View* (Paris, 2001) except for Cuba and Ecuador for 1913, derived from Astorga and Fitzgerald, "Statistical Appendix"; Chile, 1820-1990, from José Díaz, Rolf Lüders and Gert Wagner, "Economía chilena 1810-1995: evolución cuantitativa del producto total y sectorial". Pontificia Universidad Católica, Instituto de Economía, Documento de Trabajo n° 186 (1998); and Argentina prior to 1950, from Roberto Cortés-Conde, *La economía argentina en el largo plazo* (Buenos Aires, 1997), that have been spliced to Maddison's levels.